

# DENTAL IMPLANTS RECOVERED WITH CVD DIAMOND FILM

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## Abstract

Utilizing Chemical Vapor Deposition(CVD) is possible deposit a film of diamond on the surface of dental implants. The diamond by be an organic material, him confers the states of biocompatible and hemocompatible, being these of extreme importance you dental implant, deeds of titanium and its alloys, enabling diminish the symptoms of rejection. On the samples of dental implants with titanium they were deeds cleaning from the surface with oxalic acid and afterwards with ultra-sound, and determination from the morphology from the surface of the body of test with observations by scanning electronic microscope and optic. The surface of the prepared substrate had its composition analyzed by X-Rays diffraction and Energy Dispersive X-Rays(EDX). CVD diamond film was deposited by hot filament reactor assisted technique. After deposition, analysis were carried out using Scanning Electronic Microscope, X-rays diffraction and Scattering Raman Spectroscopy. The results showed a good adhesion of the CVD diamond film on the surface of dental implants.

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